





## Program at a glance

ASTRONOMY	
<b>Award</b>	Master of Science (Astronomy) Graduate Diploma of Science (Astronomy) Graduate Certificate of Science (Astronomy)
<b>Average duration</b>	Master – 1.5 Years full-time or 3 years part-time Graduate Diploma – 1 year full-time or 2 years part-time Graduate Certificate – 6 months full-time or 1 year part-time
<b>Location</b>	Online
<b>Entry requirements</b>	Bachelor degree or relevant industry experience*
<b>Work experience</b>	Not essential
<b>Structure</b>	Master – 12 units Graduate Diploma – 8 units Graduate Certificate – 4 units
<b>2011 fees</b>	\$1400 per unit (FEE-HELP is available for eligible students)
<b>Intake</b>	February and August**

\* Applicants who do not hold an appropriate qualification but who have significant relevant work experience (normally more than five years) are encouraged to apply. In some cases additional preliminary study may be required. Continuation in the program is determined by academic results.

\*\* Please note these dates were correct at the time of printing but are subject to change. Visit [www.swinburne.edu.au/studentoperations/calendar](http://www.swinburne.edu.au/studentoperations/calendar) for current semester dates.

### Trevor Barry

I had just finished work on the Broken Hill mines after 34 years of service and was looking for something to throw myself into. I had been an amateur astronomer for about 18 years prior to enrolling with Swinburne and really wanted to gain an understanding of the processes at work within the objects that I observed with my telescope.

The format of my program certainly encouraged and contributed to my learning experience. I found the research for my essays, projects and answers to other student's questions incredibly stimulating.

I found it incredibly reassuring that my Unit Instructors and Project Supervisors were just so supportive, underlining the point that there is no such thing as a silly question. For me this was a life changing experience.



## Program details

### MASTER OF SCIENCE (ASTRONOMY)

#### GRADUATE DIPLOMA OF SCIENCE (ASTRONOMY)

#### GRADUATE CERTIFICATE OF SCIENCE (ASTRONOMY)

These programs cover the fundamental concepts and 'big questions' of modern astronomy, in order to equip students with a good overall understanding and general knowledge about modern astronomy, rather than training as a professional astronomer. The Graduate Certificate is suitable for members of the general public who wish to obtain an overview of astronomy, with the option to continue to more advanced units and qualifications. The intention of the Graduate Diploma and Masters is to provide scope for more specialist study in astronomy, plus opportunities for major project work, while still maintaining an emphasis on learning about the fundamental concepts and 'big questions' of modern astronomy.

### Career opportunities

Career opportunities depend on the prior experience and tertiary qualification of students. Some graduates enhance their opportunities in astronomy and science related fields such as public outreach and teaching, though prospective students should seek accreditation information from their local accrediting bodies.

### Admission requirements

All students are expected to have a good working knowledge of the English language, to be computer literate and must have Internet access outside of Swinburne.

#### GRADUATE CERTIFICATE OF SCIENCE (ASTRONOMY)

Recognised tertiary qualification or approved equivalent. Applicants not holding a relevant tertiary qualification, but with substantial relevant experience may be admitted into the Graduate Certificate, and can transfer to a higher degree within the nested program upon obtaining at least a credit average (>65%) in the Graduate Certificate, subject to the approval of the Program Coordinator.

Upon successful completion, students may exit at this point with a Graduate Certificate of Science in Astronomy, or progress to the Graduate Diploma and Masters levels.

#### GRADUATE DIPLOMA OF SCIENCE (ASTRONOMY)

Recognised tertiary qualification or substantial relevant experience.

Full credit for units successfully completed on either an individual unit basis or in the Graduate Certificate will be granted on transfer into the Graduate Diploma. Upon successful completion, students may exit at this point with a Graduate Diploma of Science in Astronomy, or progress to the Masters levels.

#### MASTER OF SCIENCE (ASTRONOMY)

Recognised tertiary qualification. Applicants not holding a recognised tertiary qualification may be admitted to the Masters after successfully completing the Graduate Certificate and Graduate Diploma. Full credit for units successfully completed on either an individual unit basis, the Graduate Certificate or the Graduate Diploma will be granted transfers into the Masters.

### Location

These programs are offered via online learning.

### Program length

**Graduate Certificate** – Six months full-time or equivalent part-time

**Graduate Diploma** – One year full-time or equivalent part-time

**Master** – One and a half years full-time or equivalent part-time

### Time commitment

Students will need to make assessable contributions to the course's online discussion groups as well as undertake assignments and project work. The equivalent student contact hour for each unit is five hours per week during academic semesters.

### Assessment

Assessment does not include examinations. Rather, it consists of a balanced range of tasks, which typically may include essays, projects, computer managed tests and newsgroup contributions.

### Program structure

The units in this program are delivered fully online, with accompanying online and downloadable course material and communication via newsgroups and email. All units are valued at 12.5 credit points unless otherwise stated.

### Units of study

Choose 12 units of study from the following:

UNITS OF STUDY	
HET602	Exploring the Solar System (Core)
HET603	Exploring Stars and the Milky Way (Core)
HET607	History of Astronomy
HET608	Introductory Radio Astronomy and SETI
HET609	Astrophotography and CCD Imaging (prerequisite HET603)
HET611	Stellar Astrophysics (prerequisite HET603)
HET612	Major Project: History of Astronomy*
HET619	Major Project: Astronomy and Astrophysics**
HET624	Galaxies and their Place in the Universe (Core)
HET625	Cosmology and the Large Scale Structure of the Universe (prerequisite HET624)
HET602	Exploring the Solar System (Core)
HET603	Exploring Stars and the Milky Way (Core)
HET606	Tools of Modern Astronomy (prerequisite HET603)
HET607	History of Astronomy
HET610	Studies in Space Exploration (prerequisite HET602)
HET615	Major Project: Observational Astronomy*
HET617	Major Project: Computational Astrophysics*
HET618	Astrobiology and the Origins of Life*
HET619	Major Project: Astronomy and Astrophysics**
HET620	Planetary Science (prerequisite HET602)
HET624	Galaxies and their Place in the Universe (Core)

\* All Major Project units have prerequisites.

\*\* HET619 is available only for approved project proposals where approval is decided on a case-by-case basis by the Program Coordinator.

Please note:

- Not all of the above units of study will be conducted every semester
- Electives will usually be offered subject to satisfactory enrolment numbers
- Students should contact the Faculty Administration Office to obtain further information about unit of study offerings

For specific unit and course information:  
[www.swinburne.edu.au/courses](http://www.swinburne.edu.au/courses)

## Key staff

### Centre for Astrophysics and Supercomputing

- Associate Professor Sarah Maddison, Program Coordinator
- Dr Glen Mackie, Assistant Program Coordinator
- Dr Chris Fluke
- Dr Virginia Kilborn

## General information

### Facilities

As a Swinburne student you will automatically gain access to a range of facilities. These include a well-equipped library, access to online astronomical journals, articles and databases and a range of resources to assist you with your online learning.

### Fees

In 2011, tuition fees for Australian citizens and permanent residents are based on AUD \$1400 per 12.5 credit point unit of study. In the event that a unit of study is derived from another program the applicable fee will be that of the other program. All fees are reviewed each year and may increase without notice.

For all fee enquiries and up-to-date information, go to: [www.swinburne.edu.au/studentoperations/fees](http://www.swinburne.edu.au/studentoperations/fees)

### FEE-HELP

FEE-HELP is a government funded loan that helps eligible fee-paying students pay their tuition fees. FEE-HELP is not available to New Zealand citizens and most holders of Australian permanent visas, however, it is available to Australian citizens and holders of a permanent humanitarian visa.

For further information visit: [www.goingtouni.gov.au](http://www.goingtouni.gov.au)

### External staff

- Dr Terry Bridges, Queen University, Canada
- Dr Randii Wessen, NASA Jet Propulsion Laboratory
- Coordinator, Students and Programs Postgraduate  
Ms Sabina Stuart  
Email: [ssuart@swin.edu.au](mailto:ssuart@swin.edu.au)  
Telephone: 9214 5054



### Application procedure

Applications can be submitted online via the astronomy website: [astronomy.swin.edu.au/sao](http://astronomy.swin.edu.au/sao)

Applications must be accompanied by certified copies of all university transcripts, graduation certificates and proof of name and citizenship. Please also ensure that you attach a current curriculum vitae.

For the next round of closing dates, please visit [astronomy.swin.edu.au/sao/prospective/apply.xml](http://astronomy.swin.edu.au/sao/prospective/apply.xml)

### International students

These programs are only available to international students who are studying in a country other than Australia. For more information, contact Swinburne International on 1800 897 973 (within Australia) or +61 3 8676 7002 (outside Australia) or email [international@swinburne.edu.au](mailto:international@swinburne.edu.au) or visit: [www.swinburne.edu.au/international](http://www.swinburne.edu.au/international)

### Recognition of Prior Learning (RPL)

Recognition of Prior Learning (RPL) allows students to be granted credit or partial credit towards a qualification in recognition of skills and knowledge gained through work experience, tertiary qualifications and/or formal training.

### Further information

Telephone: 1300 275 794  
Email: [postgrad@swinburne.edu.au](mailto:postgrad@swinburne.edu.au)  
[www.swinburne.edu.au](http://www.swinburne.edu.au)

### Application closing dates

#### Semester 1

Applications close **4 February 2011**

#### Semester 2

Applications close **15 July 2011**

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## INFORMATION SESSIONS

Information sessions are held regularly throughout the year. They are a great opportunity to meet and talk to staff about your postgraduate study options.

The sessions help you understand what your chosen postgraduate program entails – what you can learn and what your study options are and where your qualification may take you.

For session dates visit  
[www.swinburne.edu.au/postgrad](http://www.swinburne.edu.au/postgrad)  
or call us on 1300 ASK SWIN

### Where we are

**Hawthorn campus**  
John Street,  
Hawthorn Vic 3122

**Lilydale campus**  
Melba Avenue,  
Lilydale Vic 3140

**Prahran campus**  
144 High Street,  
Prahran Vic 3181

### Questions?

1300 ASK SWIN  
(1300 275 794)  
[www.swinburne.edu.au](http://www.swinburne.edu.au)  
[postgrad@swin.edu.au](mailto:postgrad@swin.edu.au)

For information on  
postgraduate events visit:  
[www.swinburne.edu.au/postgrad](http://www.swinburne.edu.au/postgrad)

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The information contained in this course guide was correct at the time of publication, January 2011. The university reserves the right to alter or amend the material contained in this guide. The information in this guide does not apply to international students. For information about courses for international students please go to: [www.international.swinburne.edu.au](http://www.international.swinburne.edu.au)

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